NATIONAL WEATHER SERVICE INSTRUCTION 30-2112 SEPTEMBER 19, 2003

Maintenance, Logistics, and Facilities Systems/Equipment Maintenance, NWSPD 30-21

Reporting Systems, Equipment, and Communication Outages

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OPR: W/OPS1 (M. Paese) Certified by: W/OPS (J. McNulty, Jr.)

Type of Issuance: Initial

SUMMARY OF REVISIONS: This chapter supersedes Operations Manual Letter (OML) 06-01, "Reporting Systems, Equipment, and Communication Outages," dated April 13, 2001.

Signed by September 5, 2003

John McNulty, Jr. Date

Director, Office of Operational

Director, Office of Operational Systems

Reporting Systems, Equipment, and Communication Outages

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- 1. <u>Introduction</u>. The purpose of this instruction is to ensure senior level managers are made aware of system, equipment, and communication outages that threaten or could threaten public safety or are otherwise specified in Section 3 of this instruction.
- 2. Responsibilities.
- 2.1 <u>Assistant Administrator for Weather Services</u>. The Assistant Administrator designates the Director of the Maintenance, Logistics, and Acquisition Division as the focal point for outages.
- 2.2 <u>Regional Directors, Director of the National Centers for Environmental Prediction</u> (NCEP), and Director of the Office of Operational Systems (OPS). Each director establishes written procedures specifying points of contact (POC) for outages requiring as soon as practicable reporting.
- 2.3 <u>Directors of NCEP Central Operations, Hydrometeorological Prediction Center (HPC),</u>
 Aviation Weather Center (AWC), Storm Prediction Center (SPC), Marine Prediction Center
 (MPC), Tropical Prediction Center (TPC), and Chief of the Telecommunication Operations

 Center. Each business day, the directors of NCEP Central Operations, HPC, AWC, SPC, MPC,
 TPC, and the Chief of the Telecommunication Operations Center will provide a report to their
 director on all computer systems and communications outages specified in Section 3.

- 2.4 <u>Director of National Data Buoy Center (NDBC)</u>. The Director of NDBC will provide a report to the Director of OPS only when the status of an existing outage changes or a new outage occurs.
- 2.5 <u>Director of the Maintenance, Logistics, and Acquisition Division, OPS</u>. The Director of the Acquisition, Maintenance, and Logistics Division will prepare a consolidated daily report and submit it to the Assistant Administrator for Weather Services and the Deputy Assistant Administrator for Weather Services each business day.
- 2.6 <u>Regional Systems Operations Division Chiefs</u>. Each business day, the regional systems operations division directors will provide a report to the regional director on all outages specified in Section 3.
- 2.7 <u>Senior Individual on Duty.</u> If public safety is or could be affected by system, equipment, or communication failure, the senior individual on duty at Weather Forecast Offices (WFO), Weather Service Offices, River Forecast Centers (RFC), Data Collection Offices, Center Weather Service Units, West Coast/Alaska Tsunami Warning Center, Pacific Tsunami Warning Center, NCEP Central Operations, HPC, AWC, SPC, MPC, TPC, National Weather Service Telecommunication Gateway (NWSTG), and NDBC site reports as soon as practicable by telephone (voice contact) or pager to a designated POC.
- 2.8 <u>Point of Contact</u>. When a POC is notified of a system outage or failure that threatens or could threaten public safety, the POC notifies the regional director, Director of NCEP, or Director of OPS.
- 3. Reporting Requirements for Systems, Equipment, and Communications Outages.
- 3.1 During weather or hydrologic conditions that threaten or could threaten public safety, report as soon as practicable the (see paragraph 4.1) failure of:
 - 1. Automated Weather Interactive Processing System (AWIPS) requiring implementation of service backup
 - 2. Weather Service Radar-88 Doppler (WSR-88D), NOAA Weather Radio, WFO/RFC voice communications, Frame Relay Circuit, or associated equipment.
- 3.2 Report all outages if failure as described in paragraph 4.2 and Appendix C. Report as soon as practicable when backup or restoration steps fail.

4. Reports.

There are two types of reports, Incident and daily.

- 4.1 <u>Incident Reports</u>. Send an incident report as soon as practicable when failure of equipment or systems threaten or could threaten public safety. During normal business hours (Eastern time), the director notifies the Assistant Administrator for Weather Services and the Deputy Assistant Administrator for Weather Services of outages if mission impact, public visibility, or political sensitivity warrant such notification. Otherwise such notification to the Assistant Administrator and Deputy Assistant Administrator will take place at the beginning of the next business day by voice contact or the highest priority level e-mail. Sites and centers will follow-up incident reports with an e-mail or other written documentation covering items listed in Appendix A. Incident Reports include the date and time the outage began, the projected restoration date and time, actions being taken to restore the outage, an assessment of the affect of the outage on services, and severe weather conditions. Incident reports will be documented and tracked in the daily report described in Section 4.2. This documentation will address the items listed in Appendix A. When outages are restored, the time of restoration will be reported. All times given in reports will be UTC.
- 4.2 Daily Reports. Send daily reports when failure of equipment or systems exceeds or is expected to exceed the established restoration times (see Appendix C), or if criteria exists for an Incident Report using the Unscheduled Outage System (USOS). For outages specified in Section 3 but not requiring incident reports, the senior individual on duty at the site will contact designated regional, NCEP, or OPS officials by e-mail or telephone (voice or answering machine). These outages also will be recorded and tracked in the daily report. Directors will provide daily reports to the Director of the Maintenance, Logistics, and Acquisition Division, OPS by 11:30 AM, each business day. (Note: Alaska and Pacific Regions will provide reports as of their COB the previous business day.) The Daily Report consists of two sections: (1) Current outages and (2) Outages closed since the last report by region/center (see Appendix B). Within each part, the report will be organized by system (e.g., AWIPS WSR-88D, ASOS, mainframe computer, FTP server). Within each system category, sites will be listed from longest to shortest outage. For each outage, the hours of outage to date and projected date and time of restoration will be separately listed along with the cause of the outage. For current outages, the projected total outage hours will be used in listing the sites from the longest to shortest outage. The cause of each outage, the actions being taken to restore the outage, the effect on services, and any severe weather that took place during the outage will be listed. The second part of the report, outages closed since the last report, will list the total hours of the outage and the date and time the outage was closed. In both parts of the report, outages that required incident reports will be distinguished by appearing in bold print. The report format for the daily report is available at http://cmhome.nws.noaa.gov/usos. All times given in reports will be UTC.

Note: Even though the NWS standard Mail Client is Netscape Mail, Netscape is not the NWS standard browser. Use Internet Explorer 5 or 6 for the USOS because many of the features used in the USOS do not function with the Netscape browser (due to Netscape limitations). Adobe Acrobat Reader 4.0 or higher must be used for the USOS reports. If neither of these software components are installed, links are provided on the USOS screen. If your Internet Explorer browser was installed or upgraded since installing Acrobat Reader, reinstall Acrobat to have it work properly.

APPENDIX A - Incident Report

All **Incident Reports** follow-up e-mails should cover the following:

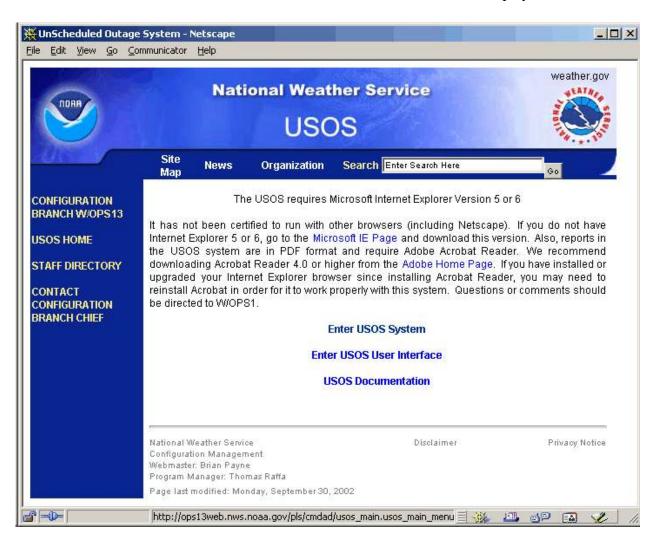
- 1. System, equipment, or communication capability that is out.
- 2. Site and responsible WFO/RFC.
- 3. Date/time outage began.
- 4. Projected restoration date and time.
- 5. Actions being taken to restore system, equipment, or communications capability.
- 6. Effect on services.
- 7. Severe weather conditions occurring during outage.

(Note: all times should be given in UTC.)

APPENDIX B - UnScheduled Outage System (USOS) Reporting

The USOS provides a web based data entry system to enter new outages, revise previously submitted open outages, close previously submitted outages, and generate reports. The data entry is developed using the Oracle DBMS, Oracle Application Server, and JavaScript. The reports are available for viewing on a personal computer or printing in hard copy format.

- 1. Open Internet Explorer.
- 2. Enter the address, http://cmhome.nws.noaa.gov/usos, to access the USOS.
- 3. Press Enter. The National Weather Service USOS screen displays.

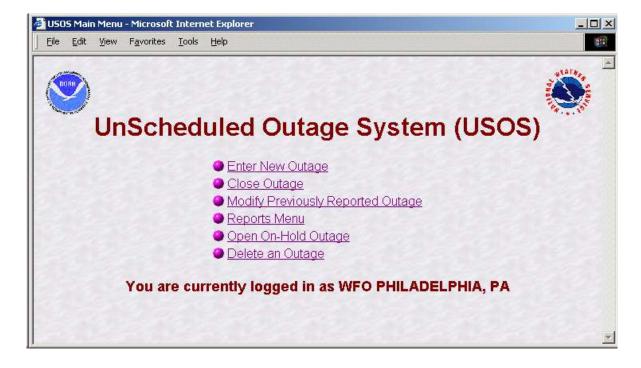


4. Click **Enter USOS System** to begin using the USOS System. The Oracle Login screen displays to enter USOS Oracle account and password information.

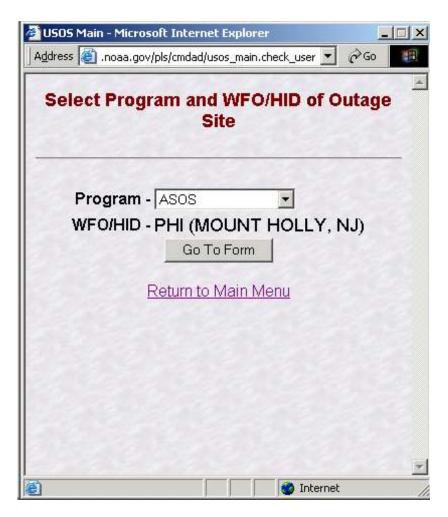


Note: To access the USOS system, you must have a valid USOS Oracle user account and password. Accounts have been established for each WFO and RFC. If you do not have a USOS account or password, please contact your Regional Electronics Program Manager or SIB Chief.

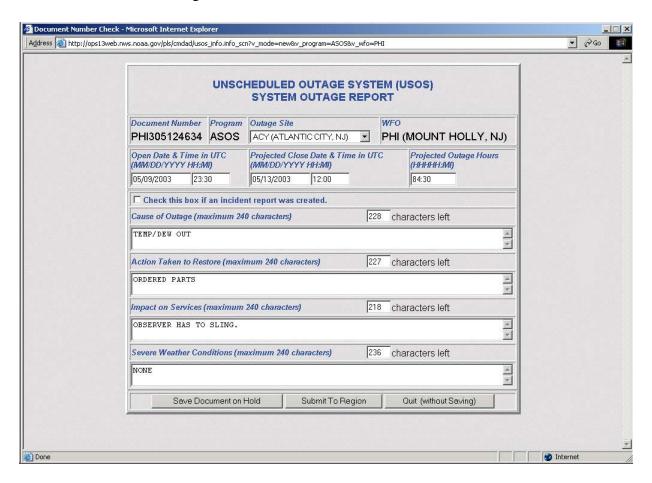
5. Enter the USOS account User Name and Password, and click the **OK** button. The USOS main menu displays.



- 1. <u>Enter New Outage</u>. This menu option provides a way to enter a new Unscheduled Outage Record to submit for Region approval. There are two components to entering a new outage: the "Select Program" menu and the "Enter New Outage" data entry form.
 - 1. Click **Enter New Outage**. The Select Program menu displays. This menu is standard for every site and contains a list of Program options for the Daily Report. A drop down list of all available programs appears by clicking the down arrow at the end of the Program box.



2. Select a Program, and click the **Go To Form** button to bring up the New Outage Daily Entry form. This form is used to enter information about a new outage and submit this information to Region for approval. A document number will be automatically generated for each new form. The Program field is automatically filled-in from the Select Program menu. The WFO field is generated based upon the Oracle login account.



If the Program field is located in the EMRS database, a drop down box is generated showing the valid Site Ids (SID) in the Outage Site box, otherwise, a free form text field displays in this box.

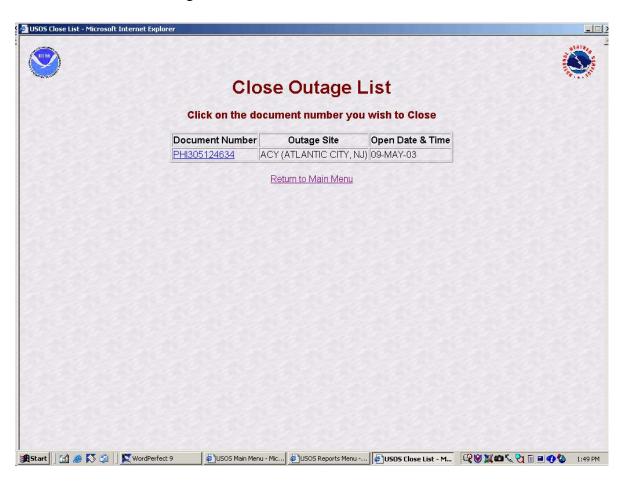
Note: To add, change or delete data in the SID pick list, contact the EMRS Program Manager within the Configuration Branch (W/OPS13). Once the information is changed within the EMRS database, it displays in the USOS.

The Projected Outage hours are calculated after entering an Open Date & Time and Projected Close Date & Time. The Projected Close Date & Time is calculated after entering an Open Date & Time and Projected Outage Hours.

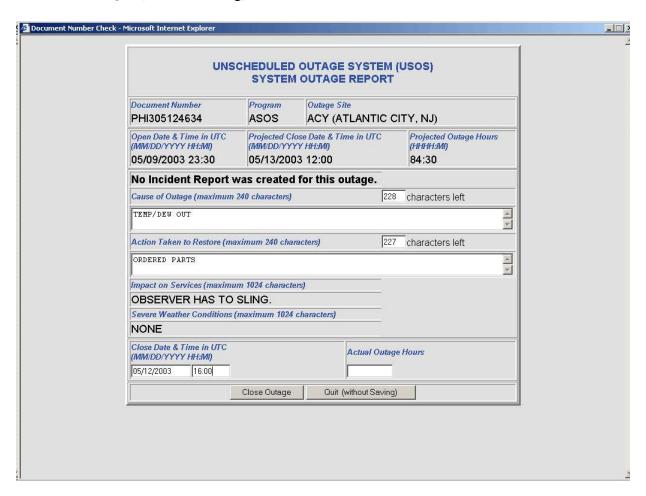
There are counters to the right of the text fields on the form indicating how many characters are left.

At the bottom of the form, there are three buttons:

- Save Document on Hold
- Submit To Region
- Quit (without saving)
- 2. <u>Close Outage</u>. This menu option provides a way to close an outage previously listed on a Daily Outage Report. There are two components to the Close Outage option: the Close Outage Record List and the Close Outage Data entry form.
 - 1. Select **Close Outage**. The Close Outage List screen displays. This list shows all the records eligible for closure.



- 2. Select the Document Number link for an outage to complete the close information. The close outage data entry form displays. There are two buttons on the bottom of the form:
- Close an Outage
- Quit (without Saving)

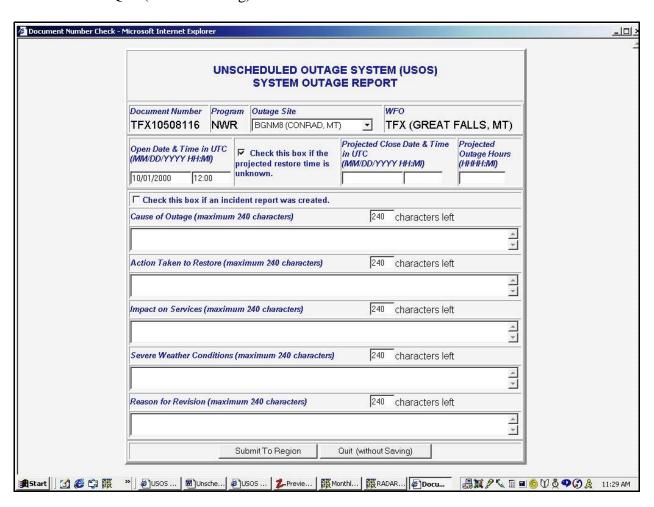


3. Enter the Close Date and Time in UTC (MM/DD/YYYY HH:MI).

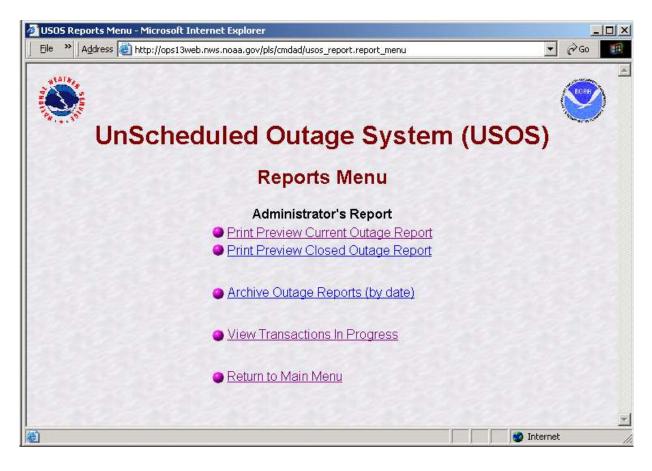
- 3. <u>Modify Previously Reported Outage</u>. This menu option provides a way to modify previously submitted information to an open outage listed on a Daily Outage Report.
 - 1. Click **Modify Previously Reported Outage**. The Open Outage List displays. This list shows all the open outage records eligible for revision.



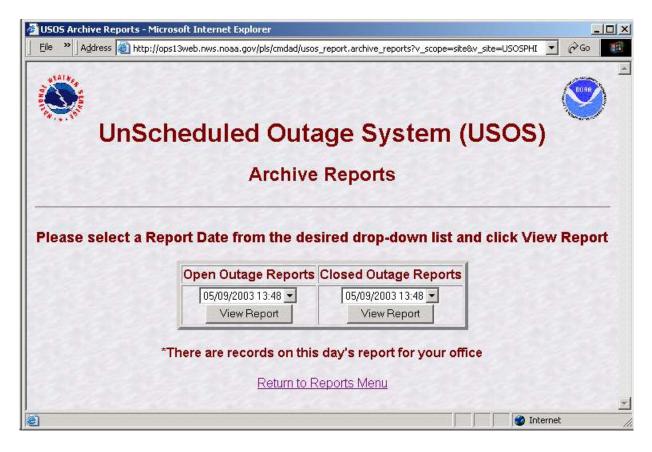
- 2. Select the Document Number link for a record to modify information for an open outage. The modify open outage data entry form displays. This form is used to revise previously submitted information for an open outage. There are two buttons on the bottom of the form:
- Submit to Region
- Quit (without Saving)



- 4. <u>Reports Menu</u>. The Reports Menu option provides a way to print daily outage reports using Adobe Acrobat. If installed properly, the Adobe Acrobat Reader launches when a report is selected. There are four choices on the Reports Menu:
 - Print Preview Current Outage Report (to see a draft open outage report for today)
 - Print Preview Closed Outage Report (to see a draft close outage report for today)
 - Archive Outage Reports (to see official reports submitted to the NWS Administrator)
 - View Transactions in Progress (to see the status of submitted outage records)



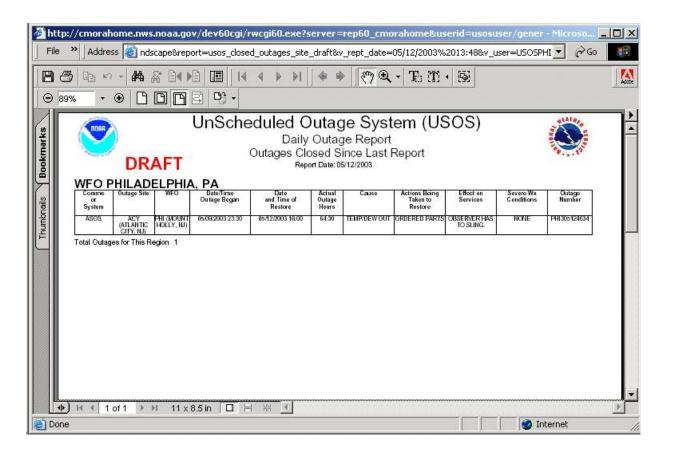
- 4.1 Archive Outage Reports Selection Screen
 - 1. Select the **Archive Outage Reports Selection Screen**. The Archive Reports selection screen displays. This screen provides a mechanism for selecting a date for an official Open Outage Daily Report or Closed Outage Daily report.



2. Click the arrow to the right of the date box to select a report for a day.

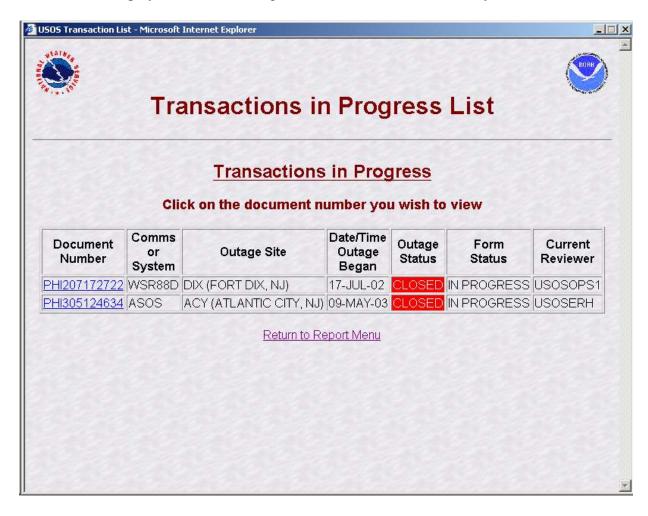
3. Click the View Report button to launch Adobe Acrobat to see the report. The Acrobat Reader has several built-in functions allowing users to print a report, save a report to disk, zoom in on a report, advance to the next page, advance to the last page, etc. To activate these features, click on the Adobe Acrobat hot keys located on the tool bar below the URL. There is an Adobe Acrobat logo located on the Adobe Acrobat tool bar.

Note: You should not use the toolbar above the URL to print the report. This toolbar pertains to Internet Explorer, and not Adobe Acrobat.



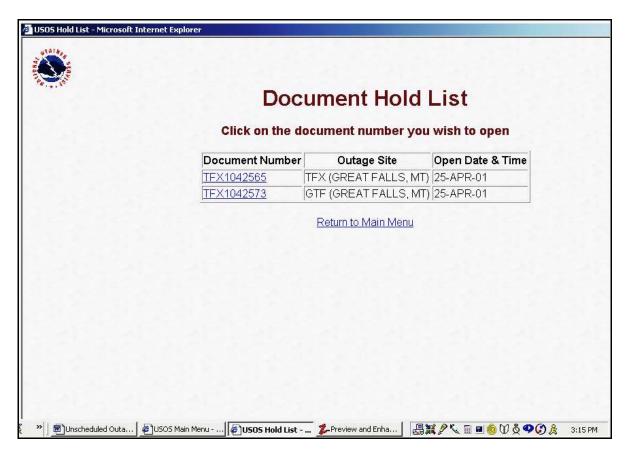
4.2 View Transactions In Progress

1. Select **View Transactions in Progress**. The Transactions In Progress List displays, a list of all outages submitted for the site currently in review.

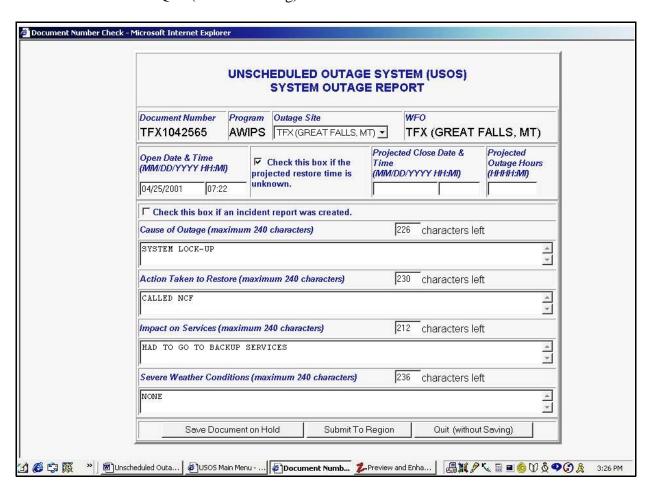


2. Click the Document Number link to view detailed information for an outage.

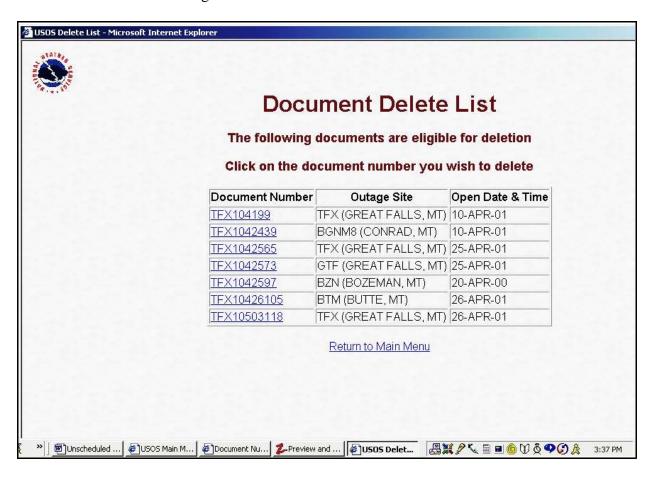
- 5. <u>Open On-Hold Outage</u>. This menu option provides a way to modify an outage previously put on hold and not yet submitted to a Region for approval. There are two components to the Open On-Hold Outage option: the Document Hold List and the on-hold outage record data entry form.
 - 1. Click **Open On-Hold Outage**. The Document Hold List displays. This list shows all the records placed on-hold in the past and not yet submitted to a Region for approval.



- 2. Select the Document Number link for an outage to complete the information for an on-hold outage record. The on-hold outage data entry form displays. This form is used to update outage information and is identical to the Enter New Outage Data Entry form. Three buttons are on the bottom of the form:
 - Save Document on Hold
 - Submit to Region
 - Quit (without Saving)



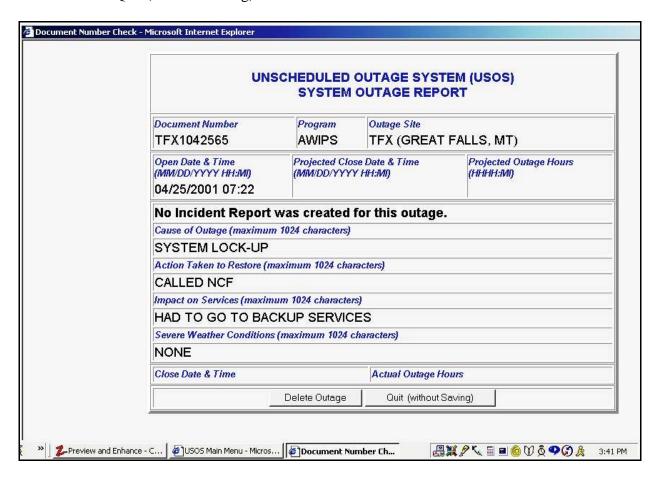
- 6. <u>Delete an Outage</u>. This menu option provides a way to remove an outage not yet approved by a Region. There are two components to the Delete an Outage option: Document Delete List and delete outage record data entry form.
 - 1. Click **Delete an Outage**. The Document Delete List displays. This list shows all the records eligible for deletion.



2. Select the Document Number link for an outage to delete an outage record.

The Delete Outage Data Entry form displays. This form is used to review a non-regional approved record for removal from the USOS. There are two buttons:

- Delete Outage
- Quit (without Saving)



7. <u>Technical Assistance</u>. If technical difficulties occur when operating the USOS system, contact the USOS Development Group within the Configuration Branch at National Weather Service Headquarters at:

National Weather Service Configuration Branch W/OPS13 1325 East West Highway, Room 16392 Silver Spring, MD 20910-3283

301-713-1892 x152

APPENDIX C - System Outages to be Reported in Daily Reports

The following system outages are required to be reported in Daily Reports each business day:

- 1. Failures requiring as soon as practicable reporting (**Incident Reports**), highlighted in bold letters (See Appendix A).
- 2. Failure of AWIPS that requires implementation of full or partial service backup as described in WSOM J-05 (if all services are handled locally, reporting not required).
- 3. Failure of NWS WSR-88D expected to last more than 12 hours.
- 4. Failure of NOAA Weather Radio expected to last more than 12 hours.
- 5. Failure of WFO or RFC voice communications expected to last more than 12 hours.
- 6. Failure of regional frame relay circuit or associated equipment expected to last more than 12 hours.
- 7. Failure of upper air equipment expected to last more than 24 hours.
- 8. Failure of ASOS that is not expected to be restored within established restoration time.
- 9. See NWSI 30-2111, Appendix B, ASOS Maintenance.
- 10. Total failure of Data Buoys and Coastal Marine Automated Network (C-MAN) stations.
- 11. NCEP Central Operations and missing individual model runs if an outage is projected to last longer than one forecast cycle.
- 12. Failure of mission-critical computer systems and communication capabilities at HPC, AWC, SPC, MPC, TPC, or the NWSTG (including the AWIPS Satellite Broadcast Network) for which on-site backup cannot be invoked and standard operating procedures fail to restore service.